## THE MATRIX: MATCHING THE OFFENDER WITH TREATMENT RESOURCES

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**T**he Matrix, an intranet-based management system developed by Iowa's Sixth Judicial District Department of Correctional Services, is designed to address risk, need, and responsivity. As the District is becoming more enlightened and directing more services to special populations, the Matrix provides a high-tech approach to assessing the risk and needs of offenders and matching them with available treatment resources and supervision strategies.

The primary mission of the Matrix is to assist the agent, supervisor, and court in selecting the most desirable intermediate sanction or the least restrictive alternative to incarceration, commensurate with community safety, to control or change offender behavior. The Matrix automates the process of identifying appropriate options, based on risk, need, and responsivity, and presents those options to agents along with a range of information for decision support. It is also helping the District to develop protocols for delivering effective services while using resources wisely, and it provides administrators useful information for agency-wide resource allocation.

### How the Matrix Works

The Matrix synthesizes data from several assessment tools-such as the Level of Services Inventory (LSI-R), Client Management Classification (CMC), American Society of Addictive Medicine (ASAM), the Brown for ADHD, and the Iowa Classification System-and uses it to plot a position for each offender on a 16-cell matrix grid. The staff psychologist in the Client Services Unit can provide further assessment using the HARE Psychopathy Checklist Revised (PCL-R) to test for such factors as aggressivity, and other assessment results are included as needed. For example, Matrix data also identify offenders who are high-risk limit setters and those who may have gang ties or other antisocial issues described by Bonta, et al. Additional data used include demographics, criminal history, and supervision status.

The Matrix consists of two axes: risk (control) and need (treatment). The instrument operates on the principle that, to supervise offenders, one must assess both areas and use that information in developing a supervision and treatment strategy. Four levels are possible on each axis: low, moderate, elevated, and high.

The client population is broken into four major groups and 16 subgroups. Specific control and treatment options available to offenders in each subgroup are presented to agents via Matrix screens. The screens provide users with a range of case management interventions consistent with the offender's risk level and criminogenic needs

(or dynamic risk factors). Matrix placements are fluid, enabling offenders to move up and down on both axes depending on their response to supervision. Generally, such movement occurs after an offender has successfully completed programming or in response to violating behavior.

The Matrix interfaces with a database to provide agents data on offender success rates, program effectiveness, client profiles, and other information. By inputting information unique to the individual offender, the agent can match programming to the offender profile, thus maintaining the principle of responsivity.

### Case-Level Operations

In working with a particular offender, the agent pops the screen open to find the supervision and treatment strategies available for working with offenders assigned to a given grid cell. Buttons on the left margin of the computer screen provide links to additional information, such as potential responses to violation that may be appropriate for offenders in a given grid placement, thresholds for response, and so forth.

Staff select the appropriate option(s) for treatment or supervision based on the offender's case management history and available resources. Resources include diagnostic and treatment services for persons with ADHD and those dually diagnosed with both substance abuse and mental health behavioral problems. Once an option is selected, the Matrix automatically displays the aggregate success rate for the option as applied in other Sixth District cases at the same grid level.

**Figure 1. Primary Matrix Screen**
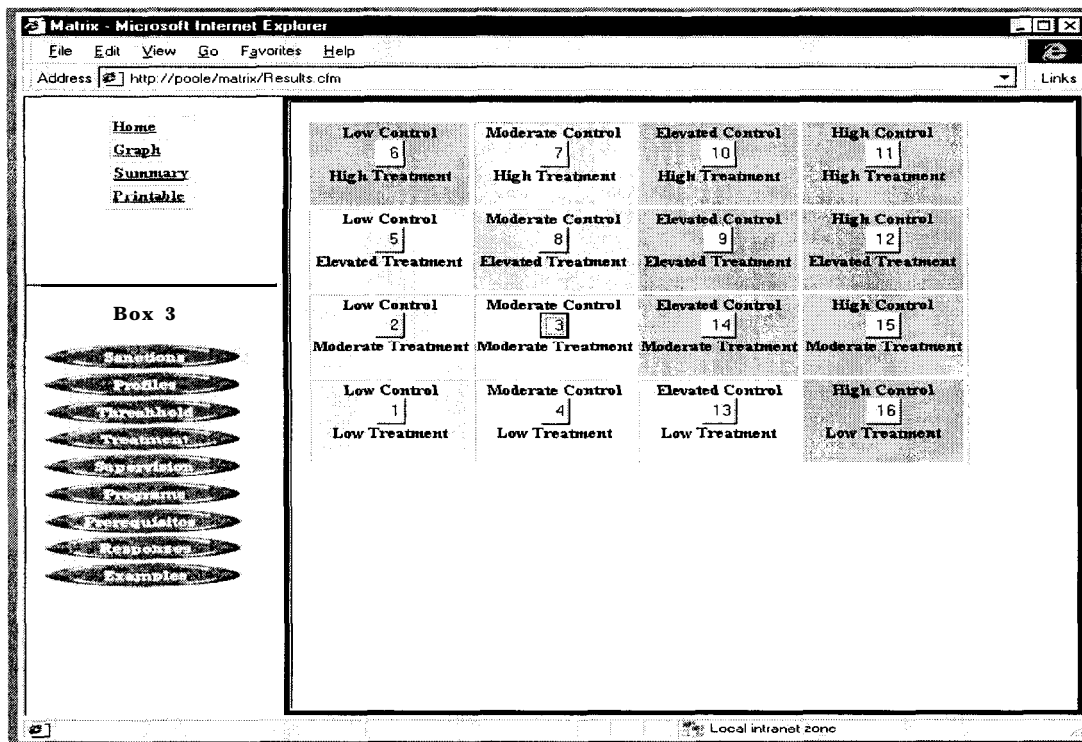
Also accessible via the Matrix screen are common definitions of terms and a bibliography of research material related to the specific program options available. For example, an agent exploring the use of the LSI could check the bibliography and find in Bonta's work the "big four" factors related to antisocial issues.

The Matrix also facilitates the development of protocol and policy to provide the best practice for managing scarce resources. For example, in addition to identifying a continuum of sanctions, the Matrix also suggests a continuum of treatment. The subtle benefit of developing a protocol for a continuum of treatment is that staff are not required to "ratchet up" responses for an offender's failure to comply. In fact, one of the assessments incorporated into the Matrix is the University of Rhode Island Change Assessment (URICA), which measures readiness for change. The Matrix also allows the agency to establish response thresholds and appropriate responses for all violating behaviors.

## Using the Matrix Online

A reproduction of the primary Matrix screen appears in Figure 1, page 18. Using a brightly colored screen display, the Matrix identifies the grid placement of an offender based on the assessment data that has been entered. In the example shown, the offender has been placed in Grid 3, a placement requiring moderate control and moderate treatment. Grid 3 is highlighted, and buttons on the left side of the screen ("Box 3") provide links to more screens with options and information specific to Grid 3 offenders.

Using the buttons on the left side of the screen, the agent can open additional screens. For example, the agent may want to review the assessment scores that determined the offender's placement in Grid 3. To do so, the agent can view the screen on which the assessment information was entered.

By using other buttons the agent can review supervision and treatment options. Figures 2, below, and 3, page 20, show expanded Matrix screens identifying sanction and treatment options for offenders in Grid 3. The agent can also obtain screens

**Figure 2. Sanctions Screen, Grid 3**
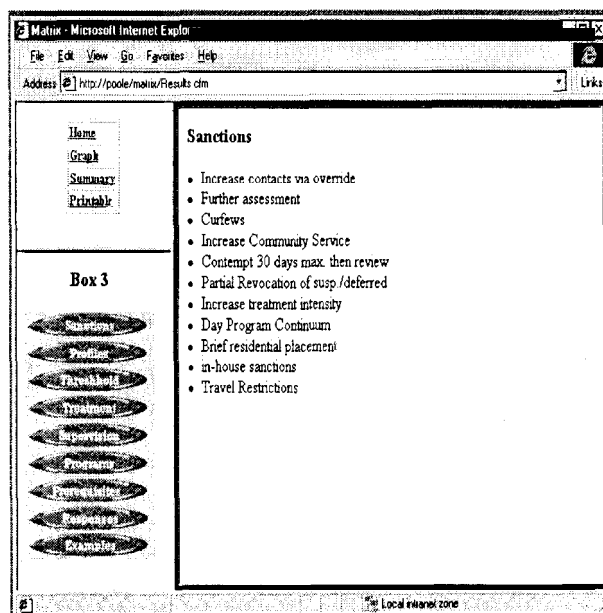
**Figure 3. Treatment Screen and Readings Supplement, Grid 3**
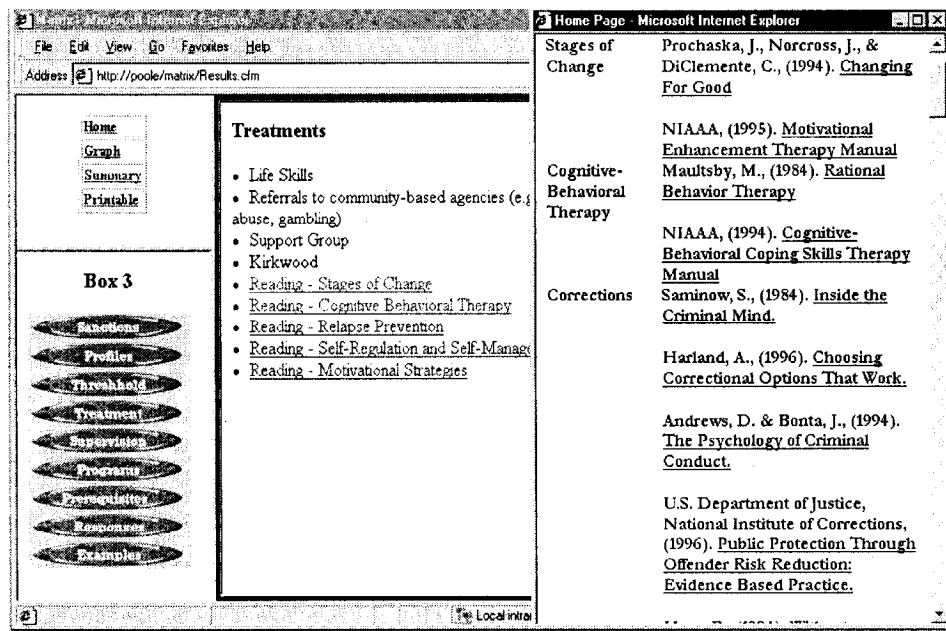


on thresholds, violation responses, and program options, as well as examples and profiles of offenders in this grid. Once an option is selected, the agent sees an aggregate percentage indicating the success rate for previous use of that option. The ability to review aggregate success data also allows the Sixth District to identify resource gaps (or needed services) and options or programs that do not work well with targeted populations.

The Matrix has given the Sixth District the ability to use an assessment-driven response to move offenders up or down on a continuum of sanctions and/or a continuum of treatments to provide for public safety and identify an appropriate response to risk and need. It also makes possible the development of an objective and equitable protocol for moving offenders within a range of treatments and sanctions as well as providing an objective criterion for revocation responses. Although further development is still underway, the Sixth District has field-tested the Matrix during the past year and has been very satisfied with its success.

## Other Uses for Matrix Data

The Sixth District has charted Matrix placements over the past several months. Using data from 1,132 placements, we have plotted client placements separately by control axis and by treatment axis. Figures 4 and 5, page 21, show the distribution for each axis. The treatment group, in particular, represents a nice, bell-shaped curve, as would be expected.

Our systems administrator has also developed a three-dimensional Matrix placement graph, shown on page 22. This visual aid allows staff to examine resource needs and identify resource gaps. From an administrative perspective, it provides a clear look at resource allocation. For example, the graphic shows that those clients who are moderate to elevated in both treatment and control appear to be those on whom the District needs to concentrate significant resources. To address the needs of offenders with high placement levels and some offenders in the elevated groups, who together make up a smaller but still significant population, it may be prudent to

use the URICA to measure their willingness to change or to engage in programming in a meaningful way. Those identified as limit-setters may not be ready to make a significant investment.

The District is also able to make workload distribution decisions by reviewing the Matrix's information. For example, we can see how many limit-setters simply need more structure to successfully complete the conditions of their supervision, and we can match them with staff who excel in supervising this type of client.
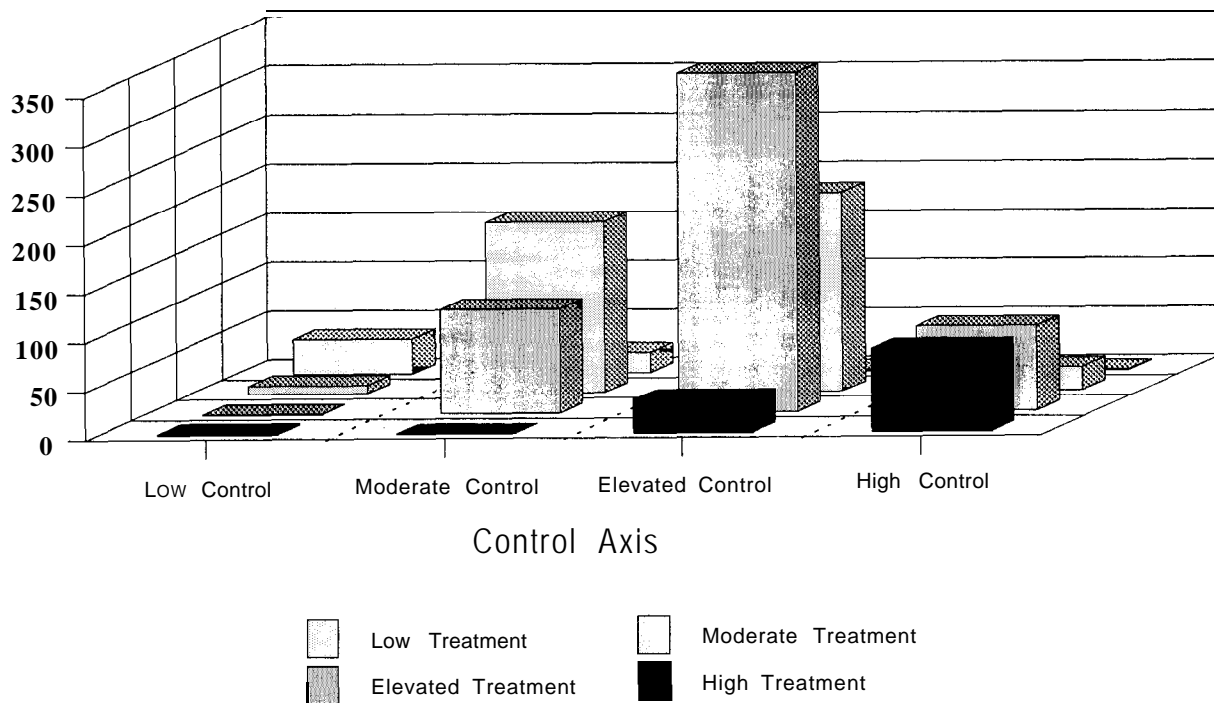
**Figure 4. Matrix Placements by Control Axis**
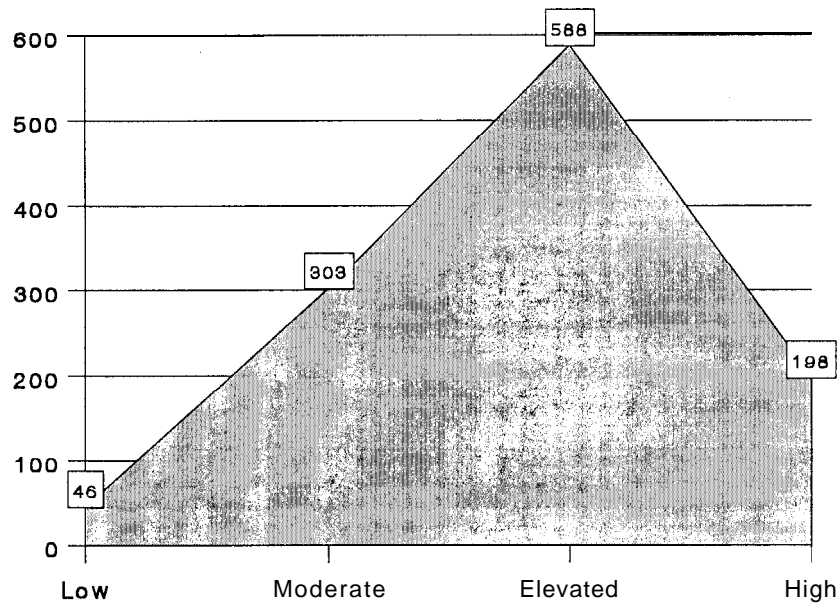


**Figure 5. Matrix Placements by Treatment Need Axis**



☐ Clients

21
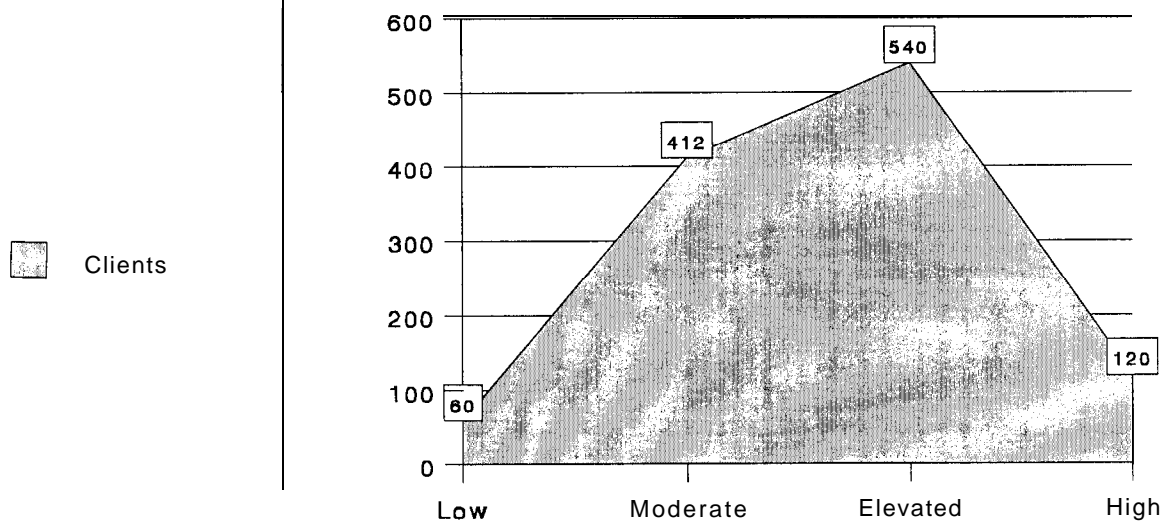
**Figure 6. Clients by Overall Matrix Placement**



Control Axis

Low Treatment
Moderate Treatment
Elevated Treatment
High Treatment

The next phase of development will be to identify an outcome track for each grid. These outcome measures will not be based upon numbers of referrals, collaterals, or workload units, but will instead reflect issues such as group facilitation, victim programming, workforce development training, and development of pro-social attitudes and behavior. The Matrix will always be an evolving assessment process, changing as we identify resource gaps and specific programs that work best with special populations.

It is important to understand that the process of developing the Matrix was not simple. It took a diagonal slice of the Sixth District several years to develop the Matrix. Without such a level of staff involvement, replication of the Matrix by other agencies would be risky.

For additional information, contact Gary Hinzman, Director, Sixth Judicial District Department of Correctional Services, Cedar Rapids, Iowa; telephone (3 19) 398-3672. An online version of this article, including full-color graphics, is available at *www.iowacbc.org.* ■

"The Matrix is a practical application of the 'What Works' literature. It is an excellent teaching tool for new officers who need to learn about practical case management concepts. The Matrix screens actually lead officers through the case planning process by prompting them to match identified client needs to resources that are locally available." -- *Dot Faust, Director, Fifth District, Des Moines, Iowa.*